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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/668,105	09/22/2000	Chen Feng	TELNP215US	9584

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EXAMINER	
SHAFER, RICKY D	

ART UNIT	PAPER NUMBER
2872	

DATE MAILED: 10/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/668,105	FENG	
	Examiner	Art Unit	
	Ricky D. Shafer	2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 August 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *6-16 and 19-44* is/are pending in the application.

4a) Of the above claim(s) *6-16,19-21,23,24,32 and 33* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *22,25-31 and 34-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☒ The proposed drawing correction filed on *11 August 2003* is: a)☒ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

1. Applicant's arguments filed 08/11/03 have been fully considered but they are not persuasive.

In response to applicant's statement that the rejection of claims 22 and 25 set forth in Paper No. 13 is in error is incorrect. The examiner is of the opinion after further review and consideration that claims 22 and 25 are drawn to elected species "A", depicted by Fig. 4. Accordingly, claims 22 and 25 have been properly examined and treated on the merits as clearly set forth in Paper No. 13.

Applicant argues that the reference to Shepard ('711) fails to teach an "image sensor".

The examiner disagrees and states that applicant's broad recitation of the term "image sensor" does not preclude elements (42 and 44), as disclosed in Fig. 2 of the Shepard reference, as being considered as an image sensor due to the fact that an image sensor by definition is an electrical device which senses and/or responds to light which is exactly how the light sensitive cell (42) and the photoelectric switch (44) of Shepard operates.

In regards to applicant's argument that the reference to Shepard ('711) fails to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., an image sensor which employs a micro-processor and an integrated circuit as part of its operation) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues that the reference to Ogura et al ('560) fails to teach an image sensor having an aperture.

The examiner disagrees and states that the reference to Ogura et al clearly illustrates an image sensor (2) having an aperture (901), note figures 8, 9, 11 and 23, wherein the aperture (901) is on the image sensor (2) in the same manner as applicant's aperture (308) is on image sensor (310), as depicted by Fig. 4.

Moreover, the use of the transitional phase "having" is considered open-ended and does not exclude additional, unrecited elements or method steps. See Crystal Semiconductor Corp. V. Tri Tech Microelectronics Int'l Inc., 246 F.3d 1336, 1348, 57 USPQ 2d 1953, 1959 (Fed. Cir. 2001); Moleculon Research Corp. v. CBS, Inc., 793 F.2d 1261, 229 USPQ 805 (Fed. Cir. 1986); In re Baxter, 656 F.2d 679, 686, 210 USPQ 795, 803 (CCPA 1981); and Ex Parte Davis, 80 USPQ 448, 450 (Bd. App. 1948).

In response to applicant's argument that the reference to Taniguchi et al ('287) fails to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the prism "deflects" light from a first path entering the prism to a second path and into an aperture of the image sensor) is not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Accordingly, for the above reasons, the rejections as set forth below are maintained.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 22, 26-30, 38, 39 and 43 are rejected under 35 U.S.C. 102(b) as being anticipated by Shepard ('711).

Shepard discloses an optical assembly comprising a housing (19,20) having an opening (26) for receiving light information, an image sensor (42) having an aperture (56), wherein the image sensor is located within the housing and operative to sense light entering the aperture, and a prism (22) mounted onto the aperture (via element 36) of the image sensor to receive light from the opening along a first path (62) and to provide at least a portion of the received light to the aperture along a second path. Note figures 1-4 and the associated description thereof.

4. Claims 22, 26-31, 36, 38, 39 and 43 are rejected under 35 U.S.C. 102(b) as being anticipated by Ogura et al ('560).

Ogura et al discloses an optical assembly comprising a housing (72, 73) having an opening (60), which serves as a window, for receiving light information from an dataform (object), an image sensor (2) having an aperture (901), wherein the image sensor is located within the housing and operative to sense light entering the aperture, a prism (G4,65) mounted onto the aperture of the image sensor to receive light from the opening along a first path (64) and to provide at least a

portion of the received light to the aperture along a second path and a lens (60, 61, 62, or 63) mounted within the housing along the first path. Note by example only, figures 8, 9, 11 and 23 and the associated description thereof.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 25, 34, 35, 37, 40-42 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogura et al ('560).

Ogura et al discloses all of the subject matter claimed, note the above explanation, except for explicitly stating that the circuit board (1) is a printed circuit board.

It is well known to use printed circuit boards in an analogous for the purpose of electrically and structurally connecting circuits.

Therefore, it would have been obvious and/or within the level of one of ordinary skill in the art at the time the invention was made to modify the circuit board of Ogura et al to include a printed circuit board in order to reduce hard wiring, the loss or displacement of electrical connecting leads as well as the reduction of manufacturing costs.

As to the limitations of claims 25, 40 and 44, it is well known to use a low loss transparent adhesive in the same field of endeavor for the purpose of bonding an optical element to another element.

Therefore, it would have been obvious and/or within the level of one of ordinary skill in the art at the time the invention was made to modify the adhesive of Ogura et al to include a low loss transparent adhesive, as is commonly used and employed in the optical art, in order to adhere the prism to the aperture of the image sensor without the loss of light information.

As to the limitations of claim 37, it would have been obvious and/or within the level of one of ordinary skill in the art at the time the invention was made to modify the dataform (object) of Ogura et al to include a bar code adjacent the opening of the optical assembly in order to read and/or process the light information therefrom, since it is well known in the art that a bar code is one form of typical dataforms.

7. Claims 22 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taniguchi et al ('287).

Taniguchi et al discloses an optical device for a bar code reader comprising an image sensor (15), wherein the image sensor is operative to sense light, and a prism (22) mounted onto the image sensor and adapted to receive light along a first path (17) and to provide at least a portion of the received light to the image sensor along a second path (SP), note Fig. 1 and the associated description thereof, except for the image sensor having an aperture.

It is well known to use an aperture, adjacent an image sensor, in the same field of endeavor for the purpose of controlling or regulating the amount of light detected by the image sensor.

Therefore, it would have been obvious and/or within the level of one of ordinary skill in the art at the time the invention was made to modify the image sensor of Taniguchi et al to include an aperture, as is commonly used and employed in the art, in order to control or regulate the amount of light being detected so such as to eliminate undesirable light from entering said image sensor.

8. Claims 26, 27 and 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taniguchi et al ('287) as applied to claims 22 and 43 above, and further in view of Taniguchi ('389).

Taniguchi et al ('287) discloses all of the subject matter claimed, note the above explanation, except for a housing having an opening with a window coupled to the opening of the housing.

Taniguchi ('389) teaches it is well known to use a housing (113) having an opening with a window coupled to the opening of the housing in the same field of endeavor for the inherent purpose of protecting an optical device from dust and other environmental conditions.

Therefore, it would have been obvious and/or within the level of one of ordinary skill in the art at the time the invention was made to modify the optical device of Taniguchi et al to include a housing having an opening with a window coupled to the opening of the housing, as

taught by Taniguchi in order to protect the optical device from dust and other environmental conditions.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication should be directed to R.D. Shafer at telephone number (703) 308-4813.

RDS

October 18, 2003

RICKY D. SHAFER
PATENT EXAMINER
ART UNIT 2872